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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,826	08/13/2001	Michael J. Tierney	017516-003240US	9903

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EXAMINER

PRIDY, MICHAEL B

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,826

Applicant(s)

TIERNEY ET AL.

Examiner

Michael B Priddy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11 and 12 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 2, 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) In claim 2 there exists an inconsistency between the language in the preamble and that of the body of the claim, thus making the scope of the claim unclear. In the preamble, line 1, applicant recites "A robotic surgical tool" with the tool holder being only functionally recited, i.e. "for use in a robotic surgical system having a processor which directs movement of a tool holder", thus indicating that the claim is directed to the subcombination, "A robotic surgical tool". However, in line 9, applicant positively recites the tool holder as part of the invention, i.e. "a sterile adapter releasably mounted to the tool holder", thus indicating that the combination, tool and tool holder, is being claimed. As such, it is unclear whether applicant intends to claim the subcombination or combination. Applicant is hereby required to indicate to which, combination or subcombination, the claim is intended to be directed, and amend the claim such that the language thereof is consistent with this intent. For examination purposes claim 2 will be considered as being drawn to the subcombination of the tool.

B) Claim 4 recites the limitation "the probe body" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 8, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Denon et al. (U.S. 5,400,267). Denon et al. teaches a robotic surgical tool 10 for use in a robotic surgical system having a processor which directs movement of a tool holder, the tool 10 comprising: a probe 11 comprising an elongate shaft having a proximal end and a distal end; a surgical end effector 12 disposed adjacent the distal end of the probe 11; an interface 13 disposed adjacent the proximal end of the probe, the interface 13 releasably coupleable with the tool holder; and circuitry 30 mounted on the probe 11, the circuitry 30 defining a signal for transmitting at least one of compatibility of the tool 10 with the system wherein the signal comprises unique tool identifier data (lines 47-68 of column 8), tool-type of the tool; coupling of the tool to the system; and calibration of the tool to the processor so as to indicate compatibility of the tool with the system; and a sterile adapter 14 releasably mounted to the tool holder, the adapter 14 coupling the tool holder to the interface 13; wherein the circuitry transmits the signal to the processor of the robotic surgical system via the adapter 14.

Concerning the functional language of claim 11, "so as to indicate tool calibration offsets of the tool", it is noted that the manner in which a device is intended to be employed does not differentiate the claimed apparatus from prior art apparatus

satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Since Denon et al. teaches a device having the circuitry capable of sending information such as tool identification data, it is believed this same circuitry is capable of sending information related to the calibration offsets of a tool.

Concerning the limitations of claim 12, Denon et al. discusses tool utilization limits and measurement thereof via a clock or calendar in lines 36-68 of column 10 and lines 1-54 of column 11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper (U.S. 6,132,368) in view of Denon et al. (U.S. 5,400,267). Cooper teaches a robotic surgical component for use in a robotic surgical system having a processor and a component holder, the component comprising: a component body 56 having an interface 52 mountable to the component holder, the body 56 supporting a surgical end effector 24; a drive system (housed in end cap 58) coupled to the body 56, the drive system moving the end effector 24 in response to commands from the processor. Hence Cooper teaches all of the limitations of the present invention except "circuitry mounted on the body, the circuitry defining a signal for transmitting to the processor, the

signal comprising at least one member selected from the group consisting of compatibility of the component with the system, a component type of the component, coupling of the component to the system, and calibration of the component.

Denon et al. teaches a circuitry 30 which, as disclosed in lines 47-68 of column 8, will be programmed with identification data that can be used by control module to identify equipment (tool). This ensures compatibility between the equipment and external power supply and control apparatus (lines 55-57 of column 8). It would have been obvious to one of ordinary skill in the art at the time of the present invention to provide circuitry as disclosed by Denon et al. to the system of Cooper et al. so that the compatibility of a tool with the system would be automatically verified thus alleviating dependency on the limited knowledge of the surgeon or medical technician (lines 61-68 of column 1 and lines 1-5 of column 2).

Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of Denon et al. Cooper teaches a robotic surgical tool for use in a robotic surgical system having a processor which directs movement of a tool holder, the tool comprising: a probe 22 having a proximal end and a distal end; a surgical end effector 24 disposed adjacent the distal end of the probe; an interface 52 disposed adjacent the proximal end of the probe, the interface 52 releasably coupleable with the tool holder; wherein the probe comprises an elongate shaft 56 suitable for distal insertion via a minimally invasive aperture to an internal surgical site of a patient body; wherein the end effector 24 is adapted for manipulating tissue, and further comprising a wrist joint 60 coupling and the end effector to the shaft 56 for varying an orientation of

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the end effector 24 within the internal surgical site. Hence Cooper teaches all of the limitations of the present invention except circuitry mounted on the probe, the circuitry defining a signal for transmitting to the processor so as to indicate compatibility of the tool with the system.

Denon et al. teaches a circuitry 30 which, as disclosed in lines 47-68 of column 8, will be programmed with identification data that can be used by control module to identify equipment (tool). This ensures compatibility between the equipment and external power supply and control apparatus (lines 55-57 of column 8). It would have been obvious to one of ordinary skill in the art at the time of the present invention to provide circuitry as disclosed by Denon et al. to the system of Cooper et al. so that the compatibility of a tool with the system would be automatically verified thus alleviating dependency on the limited knowledge of the surgeon or medical technician (lines 61-68 of column 1 and lines 1-5 of column 2).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 4, 6-8 and 11 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 6, 12, 15 and 17 of U.S. Patent No. 6,331,181. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 4, 6-8 and 11 are not patentably distinct from claims 1, 2, 6, 12, 15 and 17 of '181.

The difference between the claims of the present application and those of the patent lies in the fact that the patent claims include more elements and are thus more specific. Thus the invention of the claims of '181 are, in effect, "species" of the "generic" invention of the claims of the present invention. It has been held that the generic invention is "anticipated" by the "species". See *In re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since claims 1, 4, 6-8 and 11 are anticipated by claims 1, 2, 6, 12, 15 and 17 of '181, they are not patentably distinct therefrom.

Allowable Subject Matter

Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

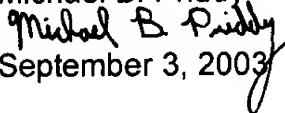
Claim 2 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Priddy whose telephone number is (703) 308-8620. The examiner can normally be reached on Mon.-Fri. 8 a.m. - 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (703) 308-2582. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Michael B. Priddy

September 3, 2003